Effective on 12/08/2004.
Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

FEE TRANSMITTAL
For FY 2006

☐ Applicant claims small entity status. See 37 CFR 1.27	

Complete if Known	
Application Number	09/877,006-Conf. #1713
Filing Date	June 11, 2001
First Named Inventor	Takeshi MIO
Examiner Name	J. A. Fletcher
Art Unit	2621
Attorney Docket No.	0054-0235P

TOTAL AMOUNT OF PAYMENT	($) 500.00

METHOD OF PAYMENT (check all that apply)

[x] Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): _____

☐ Deposit Account Deposit Account Number: 02-2448 Deposit Account Name: Birch, Stewart, Kolasch & Birch, LLP

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☐ Charge fee(s) indicated below

☐ Charge fee(s) indicated below, **except for the filing fee**

[x] Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17

[x] Credit any overpayments

FEE CALCULATION

1. BASIC FILING, SEARCH, AND EXAMINATION FEES

	FILING FEES		SEARCH FEES		EXAMINATION FEES		
Application Type	**Fee ($)**	**Small Entity Fee ($)**	**Fee ($)**	**Small Entity Fee ($)**	**Fee ($)**	**Small Entity Fee ($)**	**Fees Paid ($)**
Utility	300	150	500	250	200	100	_____
Design	200	100	100	50	130	65	_____
Plant	200	100	300	150	160	80	_____
Reissue	300	150	500	250	600	300	_____
Provisional	200	100	0	0	0	0	_____

2. EXCESS CLAIM FEES

Fee Description	**Fee ($)**	**Small Entity Fee ($)**
Each claim over 20 (including Reissues)	50	25
Each independent claim over 3 (including Reissues)	200	100
Multiple dependent claims	360	180

Total Claims	**Extra Claims**	**Fee ($)**	**Fee Paid ($)**
_____ - = _____	x _____	= _____	

HP = highest number of total claims paid for, if greater than 20.

Multiple Dependent Claims	
Fee ($)	**Fee Paid ($)**
_____	_____

Indep. Claims	**Extra Claims**	**Fee ($)**	**Fee Paid ($)**
_____ - = _____	x _____	= _____	

HP = highest number of independent claims paid for, if greater than 3.

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is $250 ($125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets	**Extra Sheets**	**Number of each additional 50 or fraction thereof**	**Fee ($)**	**Fee Paid ($)**
_____ - 100 = _____	/50 _____	(round up to a whole number) x	_____	= _____

4. OTHER FEE(S)

Fees Paid ($)

Non-English Specification, $130 fee (no small entity discount)

Other (e.g., late filing surcharge): 1402 Filing a brief in support of an appeal   500.00

SUBMITTED BY					
Signature	*Penny Caudle* 46,607	Registration No. (Attorney/Agent)	29,680	Telephone	(703) 205-8000
Name (Print/Type)	Michael K. Mutter			Date	February 26, 2007

TRANSMITTAL OF APPEAL BRIEF

	Docket No. 0054-0235P

In re Application of: Takeshi MIO et al.

Application No. 09/877,006-Conf. #1713	Filing Date June 11, 2001	Examiner J. A. Fletcher	Group Art Unit 2621

Invention: PROGRAM RECORDING/REPRODUCING METHOD AND APPARATUS

TO THE COMMISSIONER OF PATENTS:

Transmitted herewith is the Appeal Brief in this application, with respect to the Notice of Appeal filed: __December 11, 2006__   .

The fee for filing this Appeal Brief is   __$ 500.00__   .

[x] Large Entity   [ ] Small Entity

[ ] A petition for extension of time is also enclosed.

The fee for the extension of time is   _____   .

[x] A check in the amount of   __$ 500.00__   is enclosed.

[ ] Charge the amount of the fee to Deposit Account No.   __02-2448__   .
This sheet is submitted in duplicate.

[ ] Payment by credit card. Form PTO-2038 is attached.

[x] The Director is hereby authorized to charge any additional fees that may be required or credit any overpayment to Deposit Account No.   __02-2448__   .
This sheet is submitted in duplicate.

Penny Caudle Reg #46,607   Dated: __February 26, 2007__

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Docket No.: 0054-0235P
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Takeshi MIO et al.

Application No.: 09/877,006   Confirmation No.: 1713

Filed: June 11, 2001   Art Unit: 2621

For: PROGRAM RECORDING/REPRODUCING   Examiner: J. A. Fletcher
      METHOD AND APPARATUS

APPEAL BRIEF

MS Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

As required under § 41.37(a), this brief is filed more than two months after the Notice of Appeal filed in this case on December 11, 2006, and is in furtherance of said Notice of Appeal.

The fees required under § 41.20(b)(2) are dealt with in the accompanying TRANSMITTAL OF APPEAL BRIEF.

This brief contains items under the following headings as required by 37 C.F.R. § 41.37 and M.P.E.P. § 1206:

I.	Real Party In Interest	
II	Related Appeals and Interferences	
III.	Status of Claims	
IV.	Status of Amendments	
V.	Summary of Claimed Subject Matter	
VI.	Grounds of Rejection to be Reviewed on Appeal	
VII.	Argument	
VIII.	Claims	

Appendix A   Claims
Appendix B   Evidence
Appendix C   Related Proceedings

I.   REAL PARTY IN INTEREST

The real party in interest for this appeal is:

Mitsubishi Denki Kabushiki Kaisha

II.   RELATED APPEALS, INTERFERENCES, AND JUDICIAL PROCEEDINGS

There are no other appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

III.   STATUS OF CLAIMS

A.   Total Number of Claims in Application

There are 9 claims pending in the present application.

B.   Current Status of Claims

1.   Claims canceled: 1-2, 6, and 12

2.   Claims withdrawn from consideration but not canceled: None

3.   Claims pending: 3-5, 7-11 and 13

4.   Claims allowed: None

5.   Claims rejected: 3-5, 7-11 and 13

C.   Claims On Appeal

The claims on appeal are claims 3-5, 7-11 and 13.

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IV.   STATUS OF AMENDMENTS

Applicant did not file an Amendment After Final Rejection in response to the currently outstanding Final Action.

V.   SUMMARY OF CLAIMED SUBJECT MATTER

Independent claim 1 is directed to a program recording/reproducing apparatus, to which streaming signals of which a plurality of program signals are time-division-multiplexed based on an MPEG2-TS are inputted, for demultiplexing predetermined coded program signals out of the streaming signals and recording these program signals. [See page 15, lines 15-24 and Figs, 1 and 2 of the specification] The apparatus includes, *inter alia*, an extracting unit that extracts program packets of the predetermined coded program signals from the streaming signals [see page 9, lines 4-19 and Figs, 1 and 2 of the specification]; a recording unit that records the respective program packets and a discarded packet count corresponding to the number of packets discarded between two consecutively recorded program packets [see page 10, line 16 to page 11, line 6 and Figs, 1 and 2 of the specification]; a reading unit that reads the coded program signals out of said recording unit [see page 11, lines 7-11 and Figs, 1 and 2 of the specification]; and a speed converting unit that outputs the coded program signals read out by said reading unit after inserting null packets corresponding to the discarded packet count in between the two consecutive program packets [see page 11, lines 9-13 and Figs, 1 and 2 of the specification]. In addition, the recording unit records one control packet structured in the same format as the program packet as substituted for discarded packet, thereby recording a discarded packet count of the packets discarded between two consecutive program packets. [See page 11 line 6, page 15 lines 15-24, and Figs. 1 and 2 of the specification.]

Independent claim 8 is directed to a program recording/reproducing apparatus, to which streaming signals of which a plurality of program signals are time-division-multiplexed based on an MPEG2-TS are inputted, for demultiplexing predetermined coded program signals out of the streaming signals and recording these program signals. [See page 18, line 22 to page 20, line 8 and Figs. 5 and 6 of the specification] The apparatus includes, *inter alia*, an extracting unit that extracts program packets of the predetermined coded program signals from the streaming signals [see page 18 line 24 to page 19 line 9 and Figs. 5 and 6 of the specification]; a recording unit that records the respective program packets and a discarded packet count corresponding to the number of packets discarded between two consecutively recorded program packets[see page 17 line 5 to page 18 line 8 and Figs. 5 and 6 of the specification]; a reading unit that reads the coded program signals out of said recording unit [see page 17 line 5 to page 18 line 7 and Figs. 5 and 6 of the specification]; and a speed converting unit that outputs the coded program signals read out by said reading unit after inserting null packets corresponding to the discarded packet count in between the two consecutive program packets [see page 17 line 5 to page 18 line 7 and Figs. 5 and 6 of the specification]. In addition, the recording unit records a stream management packet as a first recording packet of the predetermined coded program signal. [See page 28, lines 4-9 and Figs. 5 and 6 of the specification.]

Independent claim 11 is directed to a method of recording and reproducing predetermined program signal packets that have been time-division-multiplexed with a plurality of other program signal packets into a streaming multiplexed signal. [See page 14 line 18 to page 15 line 8 and Fig. 2 of the specification.] Thee method includes, *inter alia*, extracting the predetermined program signal packets from the streaming signal [see page 15, lines 1-3 and Fig. 2 of the

specification]; discarding other program signal packets in the streaming signal; recording the extracted predetermined program signal packets and a count of the number of discarded packets between each extracted packet on a recording media[see page 15, lines 3-5 and Fig. 2 of the specification]; reading the predetermined program signal packets and the discarded packet count from the recording media; generating null packets corresponding to the discarded packet count[see page 15, lines 5-8 and Fig. 2 of the specification]; and outputting the predetermined program signal packets after inserting the generated null packets corresponding to the discarded packet count between nonconsecutive program signal packets[see page 15, lines 1-8 and Fig. 2 of the specification]. In addition, the discarded packet count is recorded in a control packet structured in the same format as a program packet. [See page 15, lines 1-8 and Fig. 2 of the specification.]

VI.   GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

A. Claims 3, 4, 7, 8, 10, 11 and 13 are rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,648,960 to Sakazaki et al. ("Sakazaki").

B. Claim 5 is rejected under 35 U.S.C. §103(a) as being unpatentable over Sakazaki.

C. Claim 9 is rejected under 35 U.S.C. §103(a) as being unpatentable over Sakazaki, further in view of MPEG-2 by Watkinson ("Watkinson").

VII.   ARGUMENT

A. Claims 3, 4, 7, 8, 10, 11, and 13 are not anticipated by Sakazaki because Sakazaki fails to disclose each and every claimed element.

In order to support a rejection under 35 U.S.C. § 102, the cited reference must teach each and every claimed element. In the present case, claims 3, 4, 6, 7, and 10-13 are not anticipated by Sakazaki for at least the reason that Sakazaki fails to disclose each and every claimed element as discussed below.

Independent claim 3 defines a program recording/reproducing apparatus for demultiplexing predetermined coded program signals out of streaming signals and recording these program signals. The apparatus includes, *inter alia*, a recording unit that records the respective program packets and a discarded packet count corresponding to the number of packets discarded between two consecutively recorded program packets, wherein the recording unit records one control packet structured in the same format as the program packet as a substitute for a discarded packet, thereby recording a discarded packet count of the packets discarded between two consecutive program packets.

Sakazaki discloses a recording/reproducing apparatus for a data packet stream that includes a data combiner 4 that combines extracted data and information relating to the number of deleted packets. For example, if the input is an MPEG-2 transport data stream, the data combiner reconstructs the transport data stream by assigning two of the extracted data packets to five recorded data packets of a 6mm digital video tape recorder (VTR) and uses the residual bytes within the sync block to transmit the number of deleted blocks. (See column 4, lines 50-62 of Sakazaki.) Although Sakazaki may disclose recording information relating to the number of deleted packets, nowhere in Sakazaki is there any disclosure of recording a control packet which includes the discarded packet count in the same format as the program packet as claimed.

In response to this argument, the Examiner asserts "although Sakazaki et al do not explicitly disclose the format of the discarded packet count control packet, there is no reason to believe they created a special form for those packets, in light of a lack of disclosure, suggestion, or teaching to that effect." Accordingly, it appears that the Examiner is asserting that Sakazaki inherently discloses recording the information relating to the number of deleted packets in a control packet which is structured in the same format as the program packet. This assertion is unfounded for the following reasons.

First, Sakazaki does not explicitly disclose the format of the discarded packet count *control* packet because Sakazaki does not disclose storing the discarded packet count in a *control* packet. Second, it does *not* necessarily flow from the disclosure of Sakazaki that the discaroded packet count would be recorded in a control packet, much less a control packet structured in the same format as the program packet. To the contrary, Sakazaki explicitly discloses that the discarded packet count is stored in the excess bytes created by storing 2 extracted data packets as five sync blocks of a 6mm digital VTR. (See column 4, lines 59-61 of Sakazaki.) Accordingly, despite the Examiner's assertion Sakazaki does explicitly disclose the format of the discarded packet count in as much as it is stored a byte information.

In addition, the Examiner assert that any disclosure of "packetized digital bits" is equivalent to the format of a "program packet" as claimed. Appellants respectfully disagree.

Independent claim 3 clearly recites extracting program packets from an MPEG2 transport stream. One skilled in the art would readily appreciate that for digital data to conform to the structure of an MPEG2 program packet, more than merely packetizing digital bits is required. In other words, MPEG2 program packets have a standardized structure.

Independent claim 11 defines a method of recording and reproducing predetermined program signal packets from streaming multiplexed signals. The method includes, *inter alia*, recording the extracted predetermined program signal packets and a count of the number of discarded packets between each extracted packet on a recording media, wherein the discarded packet count is recorded in a control packet structured in the same format as a program product. Accordingly, independent claim 11 is not anticipated by Sakazaki for at least the reason that Sakazaki fails to disclose recording the discarded packet count in a control packet structured in the same format as a program packet. (See discussed above with respect to claim 1.)

Independent claim 8 defines a program recording/reproducing apparatus, to which streaming signals of which a plurality of program signals are time-division-multiplexed based on an MPEG2-TS are inputted, for demultiplexing predetermined coded program signals out of the streaming signals and recording these program signals. The apparatus includes, *inter alia*, a recording unit that records the respective program packets and a discarded packet count corresponding to the number of packets discarded between two consecutively recorded program packets, and a stream management packet as a first recording packet of the predetermined coded program signal. Nowhere in Sakazaki is there any disclosure of a recording unit that records a stream management packet as a first recording packet of the predetermined coded program signal as claimed.

Claims 4, 7, 10, and 13 variously depend from independent claims 1 and 11. Therefore, claims 4, 7, 10, and 13 are patentable over Sakazaki for at least those reasons presented above with respect to claims 1 and 11. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 3, 4, 7, 8, 10, 11, and 13 under 35 U.S.C. § 102(b).

B. Claim 5 is patentable over Sakazaki because the Examiner fails to establish a *prima facie* case of obviousness.

In order to support a rejection under 35 U.S.C. § 103, the Examiner must establish a *prima facie* case of obviousness. To establish a *prima facie* of obviousness, three criteria must be met. First, there must be some motivation to modify the cited reference. Second, there must be a reasonable expectation of success. Finally, the combination must teach each and every claimed element. In the present case, claim 5 is not rendered unpatentable in view of Sakazaki because the Examiner fails to establish a *prima facie* case of obviousness as discussed below.

In rejecting claim 5, the Examiner takes Official Notice that detecting the speed of an input signal for recording and reproduction purposes by means of time management information is notoriously well known. Therefore, the Examiner asserts that it would have been obvious to modify the system of Sakazaki "in order to specify using time management information from the input data stream to determine an output data rate." These assertions are unfounded for the following reasons.

First, assuming, *arguendo,* that detecting the speed of an input signal by means of time management information is notoriously well known as asserted by the Examiner, the mere fact that individual elements were individually known in the art is not sufficient to establish a *prima facie* case of obviousness without some objective reason to combine/modify the cited reference. See § 2143.01 of the MPEP. Furthermore, nowhere in Sakazaki is there any disclosure or suggestion of detecting the speed of the input signal by means of time management information. To the contrary, Sakazaki discloses generating an output rate of the output data stream which is the same of the transmission rate, but detecting the data interval between packets of the same

type. See Column 4, lines 33-35 of Sakazaki. Therefore, the mere fact that detecting the speed of an input signal by means of time management information *may* be known in the art is not sufficient in and of itself to render claim 5 unpatentable over Sakazaki. Accordingly, absent some objective reason to modify the teachings of Sakazaki to include the use of time management information as claimed, the rejection of claim 5 is improper.

Furthermore, even if, *arguendo*, one skilled in the art were motivated to modify Sakazaki as suggested by the Examiner, the modification would still fail to render claim 5 unpatentable because the combination fails to disclose each and every claimed element. More specifically, nowhere in Sakazaki is there any disclosure or suggestion of recording the discarded packet count in a control packet as recited in claim 1, from which claim 5 depends.

C. Claim 9 is patentable over the combination of Sakazaki and Watkinson because the Examiner fails to establish a *prima facie* case of obviousness.

Again, in order to support a rejection under 35 U.S.C. § 103, the Examiner must establish a *prima facie* case of obviousness. In the present case, claim 9 is not rendered unpatentable over the combination of Sakazaki and Watkinson because the Examiner fails to establish a *prima facie* case of obviousness as discussed below.

In rejecting claim 9, the Examiner asserts that it would have been obvious to one skilled in the art to modify Sakazaki "in order to specify the first recording packet being a stream management packet." However, the Examiner provides no motivation for such a modification other than to assert that Watkinson discloses that MPEP-2 transport streams include a management packet. As discussed above, the mere fact that individual elements were individually known in the art is not sufficient to establish a *prima facie* case of obviousness

without some objective reason to combine/modify the cited reference. Therefore, the mere fact that it is known to transmit MPEG-2 data streams with a stream management packet as the first packet is not sufficient in and of itself to render claim 9 unpatentable.

Furthermore, Sakazaki discloses that format and structure for storing the data packets on a magnetic tape. However, nowhere does Sakazaki disclose or suggest that the recorded data stream comply with the MPEG2 standard. Nor does Sakazaki disclose or suggest that a program packet containing time management information be recorded after the stream management packet.

Watkinson discloses, *arguendo*, an MEPG-2 transport stream includes a stream management packet as a first packet, not a recorded data stream as claimed. Accordingly, absent some objective reason to modify the teachings of Sakazaki to include the use of stream management packet as claimed, the rejection of claim 9 is improper.

VIII.   CLAIMS

A copy of the claims involved in the present appeal is attached hereto as Appendix A.

Dated: February 26, 2007   Respectfully submitted,

By _Penny Caudle Reg # 46,607_
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APPENDIX A

Claims Involved in the Appeal of Application Serial No. 09/877,006

Claim 1. (Canceled)

Claim 2. (Canceled)

Claim 3. A program recording/reproducing apparatus, to which streaming signals of which a plurality of program signals are time-division-multiplexed based on an MPEG2-TS are inputted, for demultiplexing predetermined coded program signals out of the streaming signals and recording these program signals, said apparatus comprising:

an extracting unit that extracts program packets of the predetermined coded program signals from the streaming signals;

a recording unit that records the respective program packets and a discarded packet count corresponding to the number of packets discarded between two consecutively recorded program packets;

a reading unit that reads the coded program signals out of said recording unit; and

a speed converting unit that outputs the coded program signals read out by said reading unit after inserting null packets corresponding to the discarded packet count in between the two consecutive program packets,

wherein said recording unit records one control packet structured in the same format as the program packet as substituted for discarded packet, thereby recording a discarded packet count of the packets discarded between two consecutive program packets.

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Claim 4. A program recording/reproducing apparatus according to claim 3, further comprising:

a speed detecting unit that detects a speed of the streaming signals based on the number of packets contained per unit time when receiving the streaming signals,

wherein said speed detecting unit outputs the program signals at the speed detected.

Claim 5. A program recording/reproducing apparatus according to claim 3, further comprising:

a speed detecting unit that detects, during a reproducing process, a speed of the streaming signals on the basis of time management information contained in the streaming signals,

wherein said speed converting unit outputs the coded program signals at the speed detected.

Claim 6. (Canceled)

Claim 7. A program recording/reproducing apparatus according to claim 3, wherein said recording unit records a discarded packet count of the packets discarded between two consecutive program packets at every interval therebetween, thereby recording a discarded packet count of the packets discarded between two consecutive program packets.

Claim 8. A program recording/reproducing apparatus, to which streaming signals of which a plurality of program signals are time-division-multiplexed based on an MPEG2-TS are

inputted, for demultiplexing predetermined coded program signals out of the streaming signals and recording these program signals, said apparatus comprising:

an extracting unit that extracts program packets of the predetermined coded program signals from the streaming signals;

a recording unit that records the respective program packets and a discarded packet count corresponding to the number of packets discarded between two consecutively recorded program packets;

a reading unit that reads the coded program signals out of said recording unit; and

a speed converting unit that outputs the coded program signals read out by said reading unit after inserting null packets corresponding to the discarded packet count in between the two consecutive program packets, wherein said recording unit records a stream management packet as a first recording packet of the predetermined coded program signal.

Claim 9. A program recording/reproducing apparatus according to claim 8, wherein said recording unit records a program packet containing time management information after the stream management packet, and subsequently records an intra frame coded program packet.

Claim 10. A program recording/reproducing apparatus according to claim 3, wherein said recording unit records each program packet and the discarded packet count of the packets discarded between the two consecutive program packets on a magnetic tape, a magnetic disk, or an optical disk.

Claim 11. A method of recording and reproducing predetermined program signal packets that have been time-division-multiplexed with a plurality of other program signal packets into a streaming multiplexed signal, the method comprising:

extracting the predetermined program signal packets from the streaming signal;

discarding other program signal packets in the streaming signal;

recording the extracted predetermined program signal packets and a count of the number of discarded packets between each extracted packet on a recording media;

reading the predetermined program signal packets and the discarded packet count from the recording media;

generating null packets corresponding to the discarded packet count; and

outputting the predetermined program signal packets after inserting the generated null packets corresponding to the discarded packet count between nonconsecutive program signal packets, wherein the discarded packet count is recorded in a control packet structured in the same format as a program packet.

Claim 12. (Canceled)

Claim 13. A method for recording and reproducing predetermined program packets according to claim 11, further comprising:

recording a count of the number of discarded packets between nonconsecutive extracted packets at every interval there between.

APPENDIX B

No evidence pursuant to §§ 1.130, 1.131, or 1.132 or entered by or relied upon by the examiner is being submitted.

APPENDIX C

No related proceedings are referenced in II. above, hence copies of decisions in related proceedings are not provided.